FE 248
WIRE DRAG

Diagrams 1220-2 & 1222-4

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. R/H-20-8-9-83

Registery No. FE-248WD

LOCALITY

State Virginia

General Locality Atlantic Ocean

Sublocality 26 Miles East of Assateague Island & Approaches to Chesapeake Bay

19 83

CHIEF OF PARTY
LCDR R.C. Arnold

LIBRARY & ARCHIVES

DATE December 19, 1983

☆U.S. GOV. PRINTING OFFICE: 1985—566-054

FE 248
WIRE DRAG

Area 2
Chts
12221
12211
12220
12207
12200
13003
} to sign off see Record of Application

NOAA FORM 77-28 (11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTER NO.

FE-248WD

HYDROGRAPHIC TITLE SHEET

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

RH-20-08-83/RH-20-09-83

State VIRGINIA

General locality ~~VIRGINIA COAST~~ Atlantic Ocean
26 Miles East of Assateague Island and Approaches to Chesapeake Bay

Locality ~~"MARINE ELECTRIC", VIRGINIA BEACH~~

Scale 1:20,000 Date of survey ~~6 JUNE 1983~~ June 9 through June 21, 1983

Instructions dated 6 JUNE 1983 Project No. OPR-D670-RU/HE=83

Vessel NOAA SHIPS RUDE (9040) AND HECK (9140)

Chief of party LCDR RUSSELL C. ARNOLD

Surveyed by LCDR R. ARNOLD, LCDR D. WINTER, LT N. MILLETT, LT E. CLARK, ENS T. CALLAHAN

Soundings taken by echo ~~sounder, hand lead, pole~~ RAYTHEON DE-719B, Wire Drag, & Pneumatic Thermometer

Graphic record scaled by

Graphic record checked by

Protracted by Automated plot by

Verification by Evaluation and Analysis Group, Atlantic Marine Center

Soundings in ~~fathoms~~ feet ~~at~~ ~~MLW~~ ~~MLLW~~ mLLW ~~SOUNDINGS REDUCED FOR PREDICTED TIDES~~ Effective Depths reduced for Smooth Tides

REMARKS: ALL TIMES RECORDED FOR THIS SURVEY ARE GMT

STANDARDS CK'D 12-21-84
C. Loy

AWOIS and SURF - RUD 4/85

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U.S. GPO: 1974-0-768-081/1207

CONTENTS

DESCRIPTIVE REPORT
To Accompany
WIRE DRAG ~~SURVEY H-~~ Field Examination 248WD
Field Numbers RH-20-08-83
RH-20-09-83

A. AUTHORITY

This survey was accomplished in accordance with project instructions for OPR-D670-RU/HE-83, Chesapeake Bay Entrance, Virginia.

B. CHARACTER AND LIMITS OF WORK

The purpose of this portion of OPR-D670 was to investigate the wreck of the collier S/S MARINE ELECTRIC, which sank in February 1983, off Chincoteague, Virginia, and to investigate an obstruction charted near the "CB" Buoy in the outbound lane of the separation scheme at the southern entrance to Chesapeake Bay.

C. CONTROL

See the Evaluation Report, Sections 2. and 6.

Vessel positioning for all work at the MARINE ELECTRIC was accomplished with the ARGO medium range positioning systems operating in the range/range mode at a frequency of 1646.7 KHz. Daily calibrations were performed by circling Chesapeake Bay Entrance Light. Results of daily calibrations and a signal list are contained in the Supplemental Data File. Frequent whole-lane checks were taken at the "WR" Buoy near the MARINE ELECTRIC. These checks indicated that the HECK lost 1-lane while enroute from Chesapeake Light to the "WR" Buoy. Other than this one loss, the ARGO system functioned well.

The corrected signal Lists are attached to this report.

None of these checks were recorded in any of the survey's records. No position data was recorded for this buoy.

Vessel positioning for the "CB" Buoy work was accomplished with the Del Norte 520 short range system. All components of this system were baseline calibrated prior to the start of work. Daily go/no go calibration checks were accomplished by three-point sextant fix with check-fix. All calibration data is contained in the Supplemental Data File.

D. DATES OF SURVEY

This survey was begun on ~~8~~ 9 June 1983 and completed on ~~24~~ 21 June 1983.

E. INCOMPLETE ITEMS

The "Seabed Texturing" portion of this project will be accomplished by the ships in July 1983.

F. EQUIPMENT AND TECHNIQUES

See the Evaluation Report

The MARINE ELECTRIC was first investigated with Klein Side Scan Sonar, using a 100 KHz fish, to confirm position and approximate orientation. The wreck was examined by running a box-type pattern around it, with two sides of the box being parallel to the approximate axis (046°-226°) and two sides being approximately perpendicular to the axis (See Appendix B). A fathometer search was then conducted over the suspected high point and a solid trace was obtained that reduced

to 66½ feet (reduced for predicted tide and draft only; no other corrections applied). See fix #148, Sounding Volume 1, JD165. Next, a wire drag was run, parallel to the axis of wreck, which resulted in a hang at an effective depth of ~~66½~~ 65½ feet. The wreck was subsequently cleared to an effective depth of ~~65~~ 64½ feet in one direction and 64½ feet in the opposite direction when the drag was reversed. — Note: only whole feet are used, therefore the hang depth is 65 ft. and the clearance depth is 64 feet.

First glance at the wreck on side scan records would seem to indicate that the wreck is in two pieces. However, when scale is applied to the sonargram, the apparent void between the two pieces is needed to account for the total length of the vessel. This fact would thus indicate that perhaps the vessel is still in one piece.

Divers were not utilized primarily due to a large number of sharks that could be seen swimming on the surface near the wreck.

The obstruction at the "CB" Buoy was hung from two directions and investigated by divers to determine least depth. — The least depth was rejected as it significantly conflicted with the wire drag hang data.

G. CHARTING RECOMMENDATIONS

Chart a dangerous wreck cleared by wire drag to an effective depth, reduced for predicted tides, of 6X4 feet at Latitude 37°52'54.0X"N, Longitude 74°46'36.X3"W. A Notice to Mariners (Appendix C) was issued on this item. — Concur

The position of the obstruction at the "CB" Buoy is correctly charted. — not valid - see the Evaluation Report. RUDE and HECK divers obtained a least depth of 47 feet, reduced for predicted tides, in lieu of the 43-foot charted least depth. Divers obtained a 56-foot general bottom depth around the obstruction, which agrees closely with 55 feet obtained the MT MITCHELL in 1980 survey (H9922).

The RUDE and HECK recommend that office review of this item be conducted in a timely manner so that the additional effective depth ~~(47 feet VS 43 feet presently charted)~~ can be charted. - See the Evaluation Report

APPROVAL SHEET
RH-20-08-83
RH-20-09-83

Field operations contributing to the accomplishment of this survey were conducted under my supervision with frequent personal checks of progress and adequacy. This report and field sheets have been closely reviewed. See Section G. for charting recommendations.

Russell C. Arnold
LCDR, NOAA
Commanding Officer
NOAA Ships RUDE & HECK

PROJECT:
FE-248 WD,
OPR-D670-RU/HE-83
JUNE 20, 1983 VERSION

SIGNALS/STATIONS:

CAPE HENRY LIGHT HOUSE, (NEW) 1887
Light List #152 Cape Henry Light

ID NBR 1
LAT 365534.335
LON 760027.216
FILE 1

NAVY LOOKOUT TOWER "C", 1976
Field Position

ID NBR 2
LAT 365335.796
LON 755918.187
FILE 2

CAVALIER HOTEL CUPOLA, 1929

ID NBR 3
LAT 365208.381
LON 755902.012
FILE 3

VIRGINIA BEACH MUNICIPAL TANK, 1953

ID NBR 4
LAT 365031.980
LON 755923.523
FILE 4

DAM NECK MILLS NAVY TANK, 1953

ID NBR 5
LAT 364613.694
LON 755751.981
FILE 5

CHESAPEAKE LIGHT, 1966
Light List #151

ID NBR 6
LAT 365416.158
LON 754247.123
FILE 6

BATTERY CRAMER, 1980
Field Position

ID NBR 7
LAT 365504.201
LON 755944.491
ELEV'N 12.20 M
FILE 7

DAM NECK BOQ, 1981
Field Position

ID NBR 8
LAT 364717.522
LON 755734.990
ELEV'N 15.30 M
FILE 8

CAPE HENRY LIGHT-HOUSE (OLD), 1869

ID NBR 9
LAT 365532.330
LON 760030.516
FILE 9

PROJECT:
S-D970-Ru/He-83
FE-248 WD
SIGNALS/STATIONS

BATTERY CRAMER, 1980
Field Position
ID NBR 1
LAT 365504.201
LON 755944.491
FREQ 1646.70 KHZ
FILE 1

H8VR 78, 1980
Field Position
ID NBR 2
LAT 375146.270
LON 752203.968
FREQ 1646.70 KHZ
FILE 2

AZIMUTH TANK, 1976
Field Position
ID NBR 3
LAT 382319.346
LON 750402.751
FILE 3

Ocean City Inlet
North JETTY LIGHT, 1976
Field Position
ID NBR 4
LAT 381926.626
LON 750506.924
FILE 4

Light List # 136
Ocean City Inlet Light 6

Ocean City Center
WATER TANK, 1976
Field Position
ID NBR 5
LAT 382042.283
LON 750451.918
FILE 5

OCEAN CITY ~~CG~~ Coast Guard
RADIO TOWER, 1976
Field Position
ID NBR 6
LAT 381939.961
LON 750527.474
FILE 6

MYSTIC HARBOR TANK, 1976
Field Position
ID NBR 7
LAT 381936.984
LON 750703.971
FILE 7

OCEAN CITY NORTH
WATER TANK, 1977
Field Position
ID NBR 8
LAT 382206.126
LON 750423.897
FILE 8

OCEAN CITY, SOUTH
MUNICIPAL TANK, 1955
ID NBR 9
LAT 381940.442
LON 750521.961
FILE 9

APPENDIX A

DIVING OPERATIONS

Date: June 20, 1983 Unit: NOAA ships Rude & Heck

Divemaster: Johnny A. Carraway Diver-in-charge: Johnny A. Carraway

Purpose of dive: To investigate wire-drag hang near the C.B. buoy, Chesapeake Bay south entrance

Equipment: standard scuba, pneumo gage, pop-float

Planned depth: 50 feet Planned duration: 60 min.

Divers	IN Pressure	Out Pressure	Δ Pressure	In Time	Out Time	Δ Time	Depth	Comm.
Clark	3000 psi	800 psi	2200 psi	1355	1404	9 min.	60 ft.	
				1407	1415	8 min.		
				1423	1431	+8 min.		
Callahan	3000 psi	800 psi	2200 psi	The Bottom Time and depth is the same for all 3 divers!		25 min. BT		
Smith	3000 psi	300 psi	2700 psi					
Carraway	2950 psi	1200 psi	1750 psi	1447	1452	5 min	60 ft.	
				1455	1503	+8 min		
						13 min. BT		
Clark	3000	1100 psi	1900 psi	1447	1452			
				1455.	1503			

Post dive comments: The item appeared to be a large piece of metal, rising 9-10 feet off of a flat sandy bottom. It was 2-3 inches thick and about 15 feet across at its widest point. Divers were unable to determine what it was.

Johnny A. Carraway

Note: Divers reported excellent visibility at the bottom around the obstruction (15+ feet).

RCA

ITEM INVESTIGATION

DATE: June 20 1983 SHIP/LAUNCH Launch 20

LOCATION: C. B. Buoy Chesapeake Bay South Entrance

DIVE MASTER Carraway

DIVERS: Carraway
Clark
Callahan
Smith

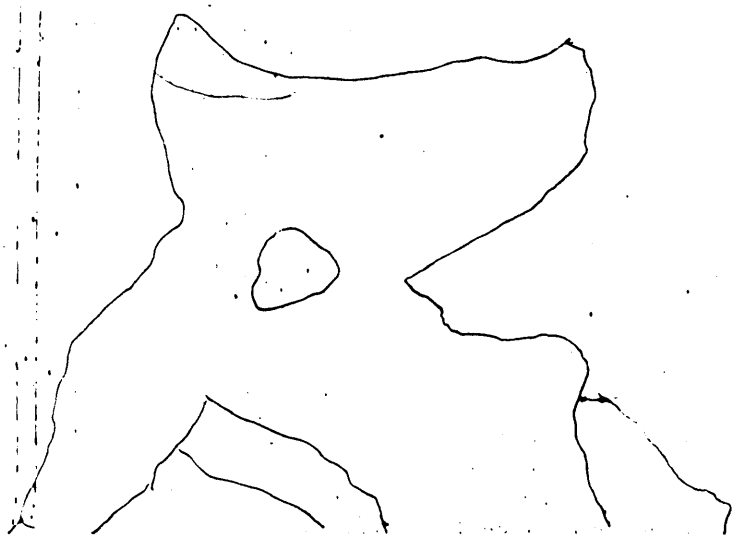
TIMES
IN WATER
UNDER WATER
ON SURFACE
IN BOAT

MAXIMUM DEPTH 60 feet DIVE DURATION 25 min. / 13 min

PACHOMETER NO.

ITEM 1	ITEM	ITEM
POSITION	POSITION	POSITION
LEAST DEPTH	LEAST DEPTH	LEAST DEPTH
TIME (GMT) DEPTH	TIME DEPTH	TIME DEPTH
1. 1856 50 ft.	1.	1.
2. 1856 - 50 ft	2.	2.
3.	3.	3.
BOTTOM	BOTTOM	BOTTOM
TIME (GMT) DEPTH	TIME DEPTH	TIME DEPTH
1. 1857 58 ft.	1.	1.
2. 1857 - 58 ft.	2.	2.
3.	3.	3.

DRAWING OF ITEM



DESCRIPTION OF ITEM

The item was a large piece of metal wreckage; divers were unable to say exactly what it was. It rose from a flat sandy bottom at 60 feet. to about 51 feet. Carraway's depth gauge gave a high depth of 57 feet and a max dep of 59 feet. This gauge is calibrated accurate as it needs.

APPENDIX C

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA SHIPS RUDE & HECK
439 West York St.
Norfolk, VA 23510

June 26, 1983

To: Commander, 5th Coast Guard District
Federal Building
431 Crawford St.
Portsmouth, VA 23705

Russell C. Arnold

From: LCDR Russell C. Arnold
Commanding Officer

Subj: Notice to Mariners

Recent survey operations were conducted by the NOAA Ships RUDE and HECK in the vicinity of the wreckage of the MARINE ELECTRIC. Positions of the wreck and approximate least depth was determined with side scan sonar operations and fathometer searches. The wreck was subsequently hung by wire drag and later cleared to an effective depth of 65 feet, reduced for predicted tides. The position of the highest point of the wreck was:

Latitude: 37°52'54.2"N
Longitude: 74°46'36.5"W

LORAN C: W - 15720.4
X - 26943.0
Y - 42037.7
Z - 59031.5

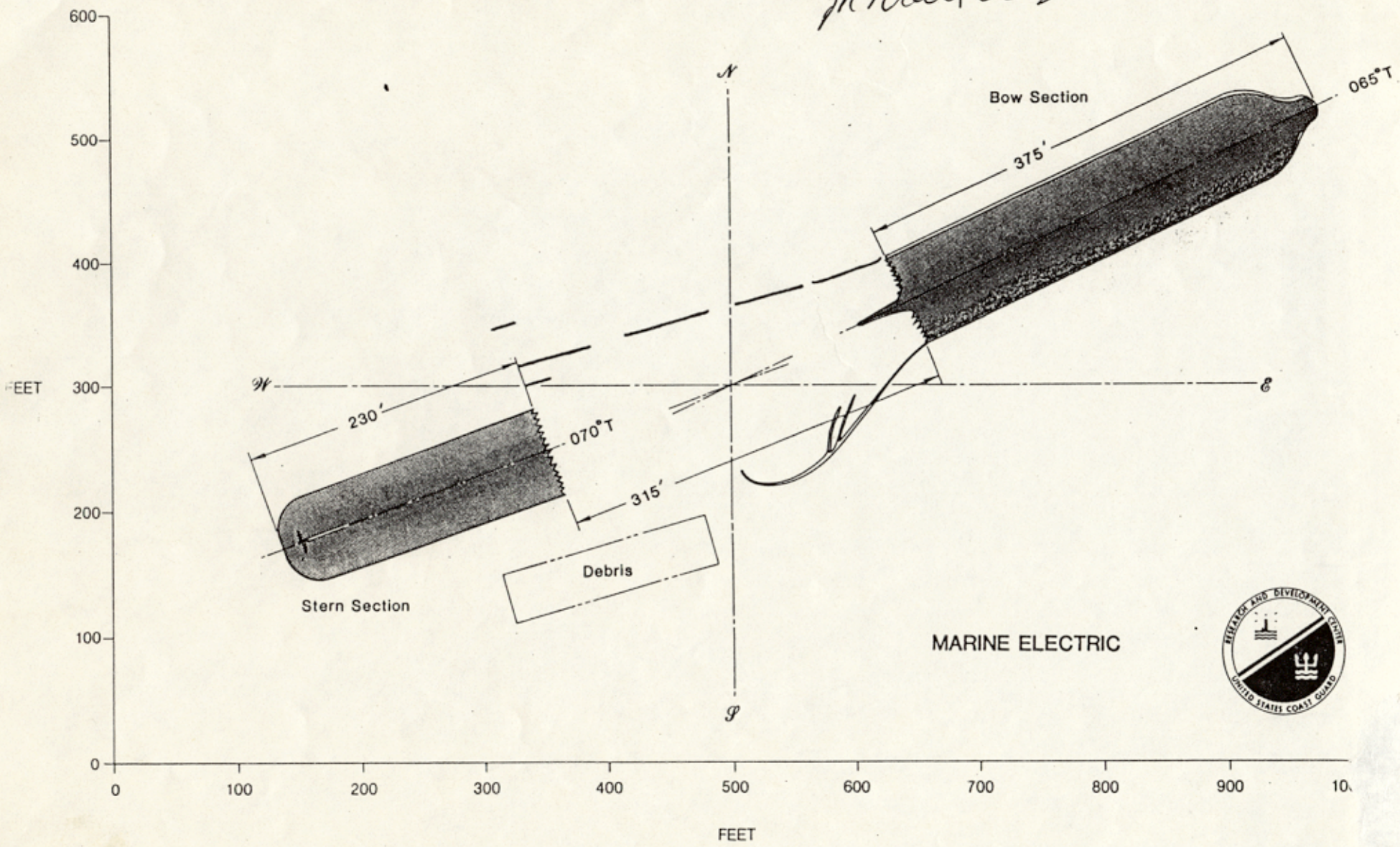
cc: AMC/MOA1
N/CG241

Note: The final position determined for the shoalest point during Evaluation and Analysis is Latitude 37°52'54.0" Longitude 74°46'36.3" And the cleared effective depth by wire drag over the wreck is 64 feet.

APPENDIX E

IO Ex. 69 Resp. Ex. ALJ Ex.
Re
For Id. Admitted Date 2/24/83
Substitution authorized

"CERTIFIED TO BE A TRUE COPY"



DATE: 9/15/83

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 863-8863 Chesapeake Bay Bridge Tunnel, VA

Period: June 9-~~21~~ 14, 1983

WIRE DRAG
~~HYDROGRAPHIC SHEET~~: OPR-D670 RU/HE-83 FE-248 WD (RJH-20-8-83)

OPR: D670

Locality: Offshore Chincoteague Inlet, VA

Plane of reference (mean lower low water): 24.84 feet

Height of Mean High Water above Plane of Reference is 2.7 feet

REMARKS: Recommended Zoning:

1. For item S/S Marine Electric apply - one hour time correction and x 1.37 range ratio.

James R Hubbard
Chief, Tidal Datums Section, Tides & Water Levels Branch

DATE: 9/15/83

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 863-8863 Chesapeake Bay Bridge Tunnel, VA.

Period: ~~July 12~~ June 20-21, 1983

WIRE DRAG:
~~HYDROGRAPHIC SHEET~~: OPR-D670-RU/HE-83 FE-248 WD (2/H-20-9-83)

OPR: D670

Locality: Offshore Chesapeake Bay entrance, Virginia

Plane of reference (mean lower low water): 24.84 feet

Height of Mean High Water above Plane of Reference is 2.7 feet

REMARKS: Recommended Zoning

1. For item #02940 and the corridor apply - 35 minute time correction and x1.34 range ratio.

James R Hubbard
Chief, Tidal Datums Section, Tides & Water Levels Branch

NOAA FORM 76-155
(11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

GEOGRAPHIC NAMES

SURVEY NUMBER

FE-248 WD

Name on Survey	A ON CHART NO. 12211 & 12222	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O.-GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
ASSATEAGUE ISLAND (title)	✓									1
ATLANTIC OCEAN (title)	✓									2
CHESAPEAKE BAY (title)	✓									3
VIRGINIA (title)	✓									4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

Charles L. Harrington

Chief Geographer - NOS/CGS

7 Nov. 1984

NOAA FORM 76-155 SUPERSEDES C&GS 197

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: FE-248WD

Number of positions	101
Number of soundings	0
Number of control stations	17

	TIME-HOURS	DATE COMPLETED
Preprocessing Examination	3	Sept. 12, 1983
Verification of Field Data		
Quality Control Checks		
Evaluation and Analysis	92	Nov. 16, 1984
Final Inspection	2	Nov. 16, 1984
TOTAL TIME	97	

Marine Center Approval — Nov. 16, 1984

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: FE-248WD

FIELD NO.: R/H-20-8-83 and R/H-20-9-83

Virginia, Atlantic Ocean, 26 Miles East of Assateague Island and Approaches to Chesapeake Bay

SURVEYED: June 9 through 21, 1983

SCALE: 1:20,000

PROJECT NO.: OPR-D670-RU/HE-83

SOUNDINGS: Wire Drag
Raytheon DE-719B fathometer
Pneumofathometer

CONTROL: ARGO (Range-Range) and Del Norte (Range-Range)

Chief of Party.....R. C. Arnold

Surveyed by.....D. D. Winter
.....N. G. Millett
.....E. M. Clark
.....T. G. Callahan

1. PURPOSE OF SURVEY

The purpose of this survey is adequately described in the Descriptive Report and in the Project Instructions. The results of this survey are discussed in this report and are portrayed on the smooth sheets (A&D) attached to this report.

2. CONTROL AND SHORELINE

a. The source of control was not adequately described in the Descriptive Report. Sections 6.e. and 6.f. of this report address this deficiency.

3. JUNCTIONS

There are no junctions on this survey.

4. COMPARISON WITH PRIOR SURVEYS

a. Hydrography

H-9922 (1980) 1:20,000
H-9099 (1969) 1:10,000
H-6595 (1940) 1:40,000
H-5355 (1933-34) 1:40,000

H-9922, H-9099, and H-6595 are prior hydrographic surveys which cover 100% of the common area of the present survey for AWOIS Item 02940, a Dangerous Submerged Obstruction at Latitude 36°51'18.7", Longitude 75°51'05.9". No conflicts exist between present clearance depths and prior hydrography. The obstruction located by the present survey was not found by any of the prior hydrographic surveys; however, the wire drag data from H-9871WD (1976) was brought forward on the smooth sheet of H-9922. See the comparison with survey H-9871WD (1976) below for discussion of this item.

H-5355 is a prior hydrographic survey which covers 100% of the common area of the present survey for the wreck S/S MARINE ELECTRIC at Latitude 37°52'54.0", Longitude 74°46'36.3". No conflicts exist between present clearance depths and prior hydrography. The hang, the wreck S/S MARINE ELECTRIC sank in February 1983.

b. Wire Drag

H-9871WD (1976) 1:20,000
H-6976WD (1945-47) 1:40,000

Prior wire drag survey H-9871WD covers 100% of the present survey area of AWOIS Item 02940, a Dangerous Submerged Obstruction at Latitude 36°51'18.7", Longitude 75°51'05.9". Clearance effective depths gained by the prior survey in the common area are greater than the clearance depths obtained by the present survey. The item hung at 45 feet and cleared by 44 feet on the prior survey is located only 27 meters north of the item hung on the present survey at 45 feet and not cleared. The present survey adequately proves the remained existence of the dangerous submerged obstruction and should be charted in accordance with the results and recommendations of survey H-9871WD (1976).

Prior wire drag survey H-6976WD covers 100% of the present survey area of AWOIS Item 02940, a Dangerous Submerged Obstruction at Latitude 36°51'18.7", Longitude 75°51'05.9", by an effective depth of 43 feet. No conflicts exist between present and prior data. No hangs or groundings existed on the prior survey within the common area.

5. COMPARISON WITH CHARTS

12211, 29th Edition, July 17, 1982
12221, 52nd Edition, August 21, 1982

a. Hydrography

Charted hydrography within the common areas originates with the previously discussed prior surveys and soundings from sources not readily ascertainable. The previously discussed prior surveys require no further consideration. Charting recommendations based on the results of this survey are:

1) AWOIS Item 02940 - Dangerous Submerged Obstruction at Latitude 36°51'18.7", Longitude 75°51'05.9" - first reported by Notice to Mariners No. 7 of 1944 was subsequently located and cleared by

H-9871WD (1976) and was verified by the present survey. The present survey hung the item in two directions with a shoalest hang depth of 45 feet but never cleared the obstruction. A pneumofathometer least depth was obtained but significantly conflicted with the hang data and the least depth was therefore rejected. It is recommended that this Dangerous Submerged Obstruction be charted in accordance with the results of H-9871WD (1976).

2) The S/S MARINE ELECTRIC - a collier more than 600 feet in length sank on February 12, 1983 at Latitude 37°52'54.0", Longitude 74°46'36.3". The shoalest point on the wreck was hung at an effective depth of 65 feet and was subsequently cleared in opposing directions by 64 feet. It is recommended that this wreck be charted as a Dangerous Sunken Wreck cleared by wire drag by an effective depth of 64 ft. at Latitude 37°52'54.0", Longitude 74°46'36.3".

b. Aids to Navigation

Two floating aids to navigation were common to the surveyed areas. The wreck buoy on the S/S MARINE ELECTRIC was not located. The Chesapeake Bay Entrance Lighted Whistle Buoy CB was located and agrees well with its charted position. Three fixed aids to navigation were used as control stations and are listed in the survey's control lists. All aids to navigation appear to serve their intended purposes. All fixed and floating aids noted in this survey except the wreck buoy on the S/S MARINE ELECTRIC are properly noted in the U.S. Coast Guard Light List, Volume I, 1983.

6. CONDITION OF SURVEY

The field sheets, field records, and reports are adequate and conform to the requirement of the Wire Drag and Hydrographic Manuals except:

a. All hydrography conducted in support of this survey is of reconnaissance value only as no sounding correctors were determined. However, the shoalest position found by fathometer search on the S/S MARINE ELECTRIC (Position 148 at Latitude 37°52'53.7", Longitude 74°46'36.9") agrees extremely well (only 18 meters difference) with the hang position (Latitude 37°52'54.0", Longitude 74°46'36.3") of the shoalest point.

AWOIS #00318

b. AWOIS Item 02940 - a Dangerous Submerged Obstruction at Latitude 36°51'18.7", Longitude 75°51'05.9" - was not cleared.

c. No field A&D sheets or smooth composite draftings were generated by the field.

d. The Descriptive Report is basically inadequate and incomplete. Chapters 5. of the Wire Drag Manual and the Hydrographic Manual specify the general requirements. Some of the items missing from the Descriptive Report are:

Survey Vessels
Control Stations
Signal Lists
Comparison with Charts
Comparison with Prior Surveys
Reference to Reports
Abstracts (Electronic Correctors, Statistics, Sonar Coverage, Sonar Target, etc.)

e. Apparently, the control stations used were not recovered as required by section 3.2.1. of the Project Instructions. The hydrographer makes no mention of station recovery or of recovery notes being submitted.

f. Several station names in the signal list required correction to agree with the establishment records and all stations required the addition of the dates of station establishment. The signal list for this survey was not in the Descriptive Report but was found in the survey's accordian folder. The signal list has been corrected and is included in the Descriptive Report.

g. Only two prior surveys (H-9922 and H-9871WD) of the seven prior surveys distributed to the field were included with the field records. No meaningful comparisons were made by the hydrographer.

h. As stated in section 1.7 of the Project Instructions, comparisons and application of data was intended for charts 12211 and 12221. The hydrographer did not make comparisons with either of these charts.

i. The Wire Drag Volumes lacked sufficient observational data to facilitate reliable positioning of hangs, particularly where a double hang has occurred.

j. Additional annotations on the field plots, fathograms, sonargrams, Wire Drag Volumes, Sounding Volumes, and particularly the strip chart recordings would have been desirable.

7. COMPLIANCE WITH PROJECT INSTRUCTIONS

This wire drag field examination adequately complies with Project Instructions OPR-D670-RU/HE-83 except as noted in this report.

8. ADDITIONAL FIELD WORK

This is an adequate basic wire drag field examination for the S/S MARINE ELECTRIC and no additional work is recommended on this wreck. This survey is adequate for AWOIS Item 02940, a Dangerous Submerged Obstruction, only in conjunction with prior survey H-9871WD (1976); and in that consideration, no additional work on this obstruction is recommended.

9. MISCELLANEOUS

In strips containing a hang, the area past the initial contact on the hang was not claimed for effective depth coverage as the program of testing for lift is not considered sufficient to claim effective depths past the point of hang.

Maurice B. Hickson, III
Cartographer
Evaluation and Analysis

Inspection Report
FE-248WD

The completed survey has been inspected with regard to survey coverage, investigation of hangs and clearance depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

R. D. Sanocki
Chief, Hydrographic Surveys
Processing Section
Hydrographic Surveys Branch

David B. MacFarland, Jr., LCDR, NOAA
Chief, Hydrographic Surveys Branch

Approved November 16, 1984

Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF CHARTING AND GEODETIC SERVICES
ROCKVILLE, MARYLAND 20852

APR 5 1989

241 - Attach to DR for FE-248

RLA

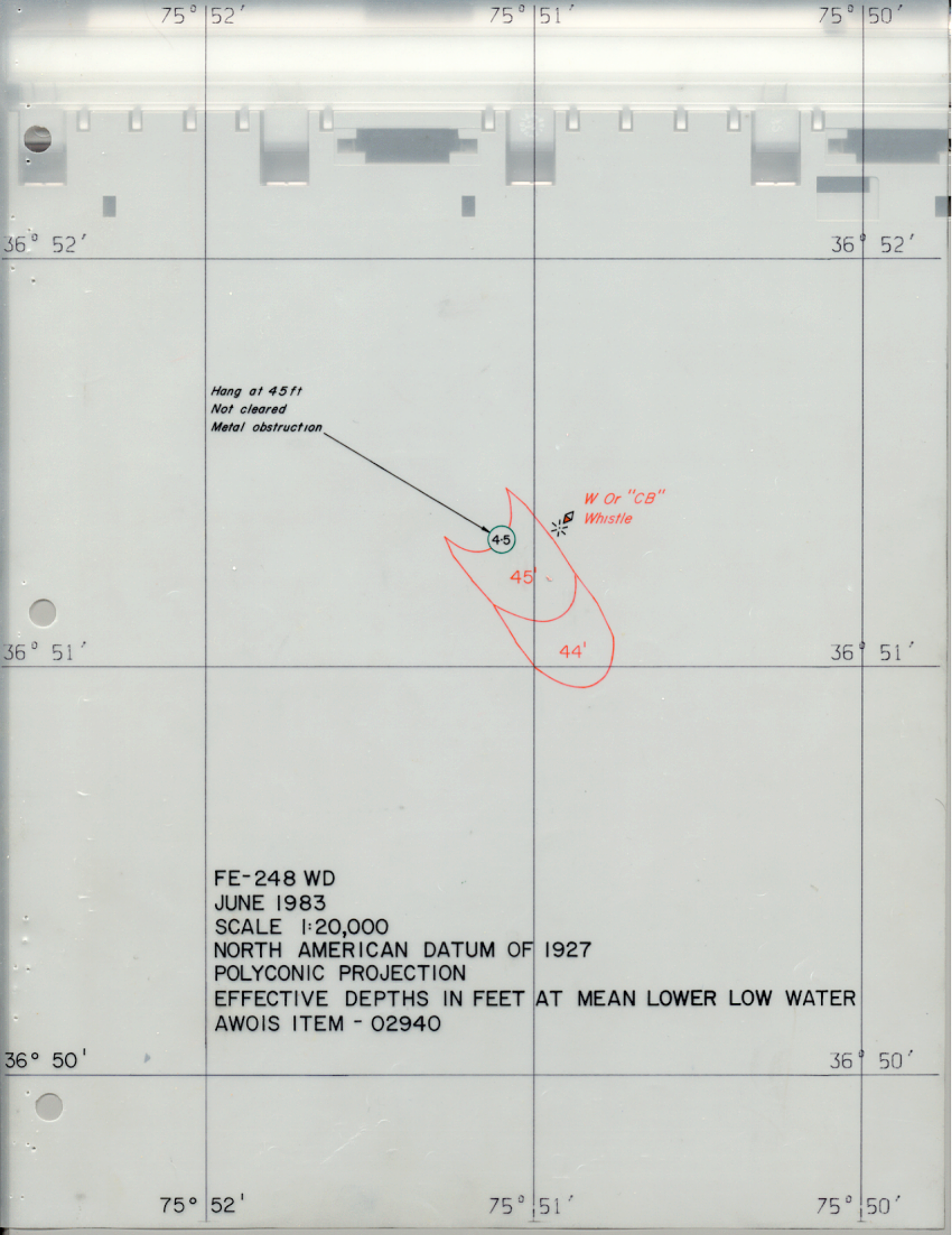
MEMORANDUM FOR: Commander Russell C. Arnold, NOAA
Chief, Hydrographic Surveys Branch

FROM: Lieutenant Commander Maureen R. Kenny, NOAA
Chief, Operations Section

SUBJECT: Charting Recommendation for Obstruction - FE-248WD

A dangerous submerged obstruction (AWOIS item no. 2940), located in latitude 36°51'18.7"N, longitude 75°51'05.9"W, was investigated with a wire drag and a diver investigation during survey FE-248WD (1983). The hydrographer commented in his field notes that, although the obstruction was hung, a reliable clearance could not be obtained due to the erratic lifts and sags of the wire. The divers, however, stated they had excellent visibility and were able to describe and sketch the obstruction as well as obtain a least depth using the pneumatic depth gage. Because of the significant discrepancy between the hang depth and the divers' least depth, the evaluator recommended charting the obstruction according to the results of prior survey H-9871WD (1976).

After a reevaluation of the field data, a decision has been made to accept the diver investigation data, and recommend charting the obstruction with a least depth of 47 feet.

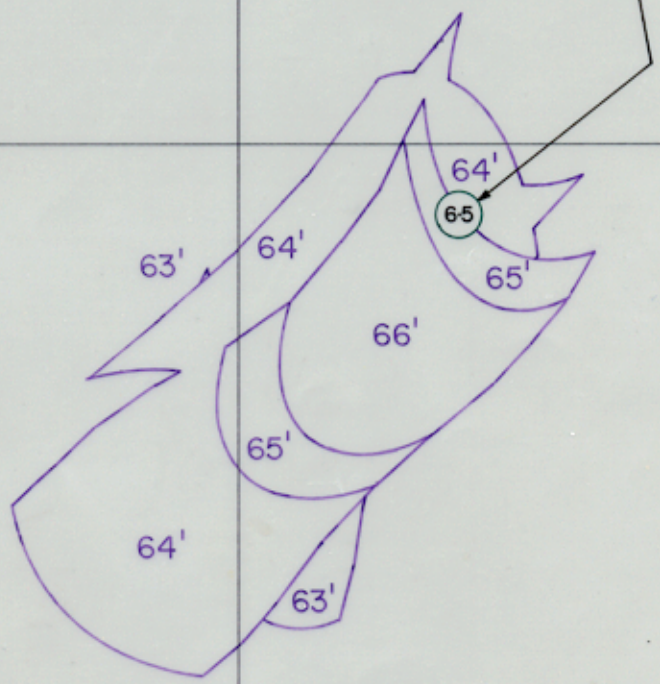


FE-248 WD
JUNE 1983
SCALE 1:20,000
NORTH AMERICAN DATUM OF 1927
POLYCONIC PROJECTION
EFFECTIVE DEPTHS IN FEET AT MEAN LOWER LOW WATER
AWOIS ITEM - 02940

74° 48′ 74° 47′ 74° 46′

37° 54′ 37° 54′

Hang at 65 ft
Cleared by 64 ft
Wreck - S/S MARINE ELECTRIC



37° 53′ 37° 53′

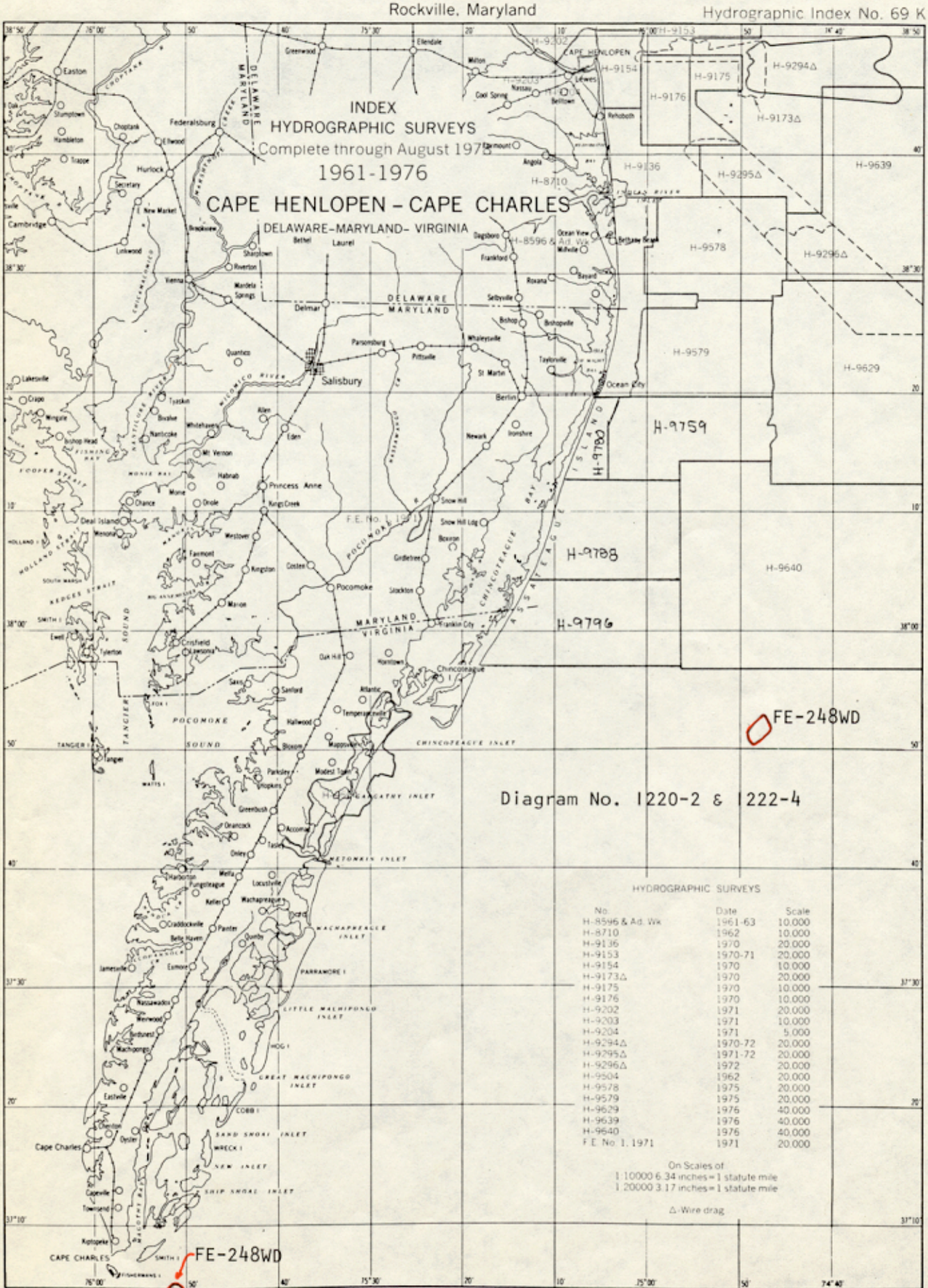
37° 52′ 37° 52′

FE-248 WD
JUNE 1983
SCALE 1:20,000
NORTH AMERICAN DATUM OF 1927
POLYCONIC PROJECTION
EFFECTIVE DEPTHS IN FEET AT MEAN LOWER LOW WATER
ITEM - S/S MARINE ELECTRIC

74° 48′ 74° 47′ 74° 46′

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Rockville, Maryland

Hydrographic Index No. 69 K



HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-8596 & Ad. Wk	1961-63	10,000
H-8710	1962	10,000
H-9136	1970	20,000
H-9153	1970-71	20,000
H-9154	1970	10,000
H-9173Δ	1970	20,000
H-9175	1970	10,000
H-9176	1970	10,000
H-9202	1971	20,000
H-9203	1971	10,000
H-9204	1971	5,000
H-9294Δ	1970-72	20,000
H-9295Δ	1971-72	20,000
H-9296Δ	1972	20,000
H-9504	1962	20,000
H-9578	1975	20,000
H-9579	1975	20,000
H-9629	1976	40,000
H-9639	1976	40,000
H-9640	1976	40,000
F.E. No. 1, 1971	1971	20,000

On Scales of
1:10000 6.34 inches = 1 statute mile
1:20000 3.17 inches = 1 statute mile

Δ-Wire drag

A5324

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. FE-248WD

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
12221	5-22-85	H. Ladd	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 82 NO CORR retained as charted
12211	2-11-86	R. Fecht	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 45 FULLY APPLIED
12207	2-11-86	R. Fecht	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 25 NO CORR, RETAINED AS CHARTED
12220	2-11-86	R. Fecht	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 52 NO CORR, RETAINED AS CHARTED
12200	2-11-86	R. Fecht	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 50 FULLY APPLIED
13003	2-11-86	R. Fecht	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 60 FULLY APPLIED revised position and revised "10 3/4" to "10 1/2"
12208	11/19/91	J. Robinson	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 11 Reinstruction - See also later date H-10337 dated 1990
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63